| Ref<br># | Hits   | Search Query  | DBs  | Default<br>Operat<br>or | Plural<br>s | Time Stamp          |
|----------|--------|---|--|-------------------------|-------------|---------------------|
| S65      | 13     | ("3575336"   "4098125"  <br>"4728214"   "4974767"  <br>"5662261"   "5906308"  <br>"5934543"   "5944249"  <br>"5985651"   "6215195"  <br>"6309891"   "6311890"  <br>"6325269").PN. OR<br>("6457627").URPN. | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR                      | ON          | 2005/06/16<br>17:18 |
| S66      | 255368 | wire with (double or two) or<br>(first and second) with<br>capillary with ( bond or<br>bonding or bonded or ball<br>or balls or bump or bumps)<br>and electrode   | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR                      | ON          | 2005/06/16<br>17:19 |
| S67      | 7      | S66 and (press\$3 with open with section with (first or second) with hole)  | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR                      | ON          | 2005/06/16<br>17:23 |
| S68      |        | wire and (bonding or<br>bonded or bond or bump or<br>bump or ball or balls) and<br>capillary and (press\$3 with<br>open with section with (first<br>or second) with hole)                                 | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR                      | ON          | 2005/06/16<br>17:25 |
| S69      | 0      | wire and (bonding or<br>bonded or bond or bump or<br>bump or ball or balls) and (<br>two or double) near2<br>capillary and (press\$3 with<br>open with section with (first<br>or second) with hole)       | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR                      | ON          | 2005/06/16<br>17:25 |

| S70 | 1    | wire and (bonding or<br>bonded or bond or bump or<br>bump or ball or balls) and (<br>two or double) and capillary<br>and (press\$3 with open<br>with section with (first or<br>second) with hole)  | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/16<br>17:26 |
|-----|------|--|--|----|----|---------------------|
| S71 | 3    | (Double or two ) with (capillary or capillar or tool pr tool or capillaries) with wire with press with (hole or holes)   | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/16<br>17:28 |
| S72 | 3    | (Double or two ) with (capillary or capillar or tool or tools or capillaries) with wire with press with (hole or holes)  | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/16<br>17:33 |
| S73 | 24   | ("1465255"   "2948953"  <br>"2958926"   "3022369"  <br>"3114194"   "3253324"  <br>"3646296"   "3722379"  <br>"3887904"   "3960309").<br>PN. OR ("5042146").<br>URPN.                               | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON | 2005/06/16<br>17:30 |
| S74 | 10   | ("3114194").URPN.  | USPAT  | OR | ON | 2005/06/16<br>17:31 |
| S75 | 2006 | wire and (bond or bonding<br>or bonded or bumps or<br>bump or balls or ball) and ((<br>first or second or one or<br>two or dual or double) adj (<br>capillary or capillaries or<br>tool or tolls)) | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/16<br>17:35 |

| S76 | 23  | S75 and (pressing with wire with (electrode or substrate))   | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/16<br>17:39 |
|-----|-----|--|--|----|----|---------------------|
| S77 | 13  | ("3575336"   "4098125"  <br>"4728214"   "4974767"  <br>"5662261"   "5906308"  <br>"5934543"   "5944249"  <br>"5985651"   "6215195"  <br>"6309891"   "6311890"  <br>"6325269").PN. OR<br>("6457627").URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON | 2005/06/16<br>17:51 |
| S78 | .15 | ("4415115"   "4886200"  <br>"4911350"   "5421503"  <br>"5437405"   "5558270"  <br>"5662261"   "5839640"  <br>"5871141"   "5884830"  <br>"5906308"   "5931368"  <br>"6041995").PN. OR<br>("6325269").URPN.  | US-PĠPU<br>B;<br>USPAT;<br>USOCR   | OR | ON | 2005/06/16<br>17:59 |
| S79 | 26  | ("20010005054"   "20010045443"   "20020010069"   "20020033408"   "20020096551"   "20020158374"   "3917148"   "3971499"   "4405074"   "4821944"   "4974767"   "5421503"   "5437405"   "5465899"   "5558270"   "5662261"   "5871141"   "5906308"   "5931368"   "5954260"   "5984162"   "6065667"   "6155474"   "6213378"   "6325269"   "6354479"). PN. OR ("6715658"). URPN. | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON | 2005/06/16<br>18:00 |
| S80 | 19  | ("4571688"   "4974767"  <br>"5558270"   "5559054").<br>PN. OR ("5871141").<br>URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON | 2005/06/16<br>18:03 |

| S81 | 7    | ("5328079"   "5616520"  <br>"5633204"   "5821494"  <br>"5871141"   "5957371"  <br>"6020220").PN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON   | 2005/06/16<br>18:06 |
|-----|------|---|--|----|------|---------------------|
| S82 | 76   | ("4000842"   "4263606"  <br>"4742023"   "4818728"  <br>"4970571"   "5289631").<br>PN. OR ("5633204").<br>URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON   | 2005/06/16<br>18:07 |
| S83 | 11   | ("5395037"   "5559054"  <br>"5633204"   "5686353"  <br>"5723364"   "5740956").<br>PN. OR ("5953624").<br>URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON   | 2005/06/16<br>18:10 |
| S84 | 1156 | wire with ( bonding or bond or bump or bumps or bonded or ball or balls )with (apparatus or tool oe device) with (( retractable or retractor or movable ) or ( first or second or dual or inner or outer)) with (capillary or capillaries or capillar or tool or tools) | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON   | 2005/06/17<br>08:48 |
| S85 | 9    | ("3672047"   "4315128"  <br>"4564734"   "4598855"  <br>"4765526"   "5328078"  <br>"5735451").PN. OR<br>("5992725").URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON   | 2005/06/17<br>09:02 |
| S86 | 43   | ("3087239"   "3252203"  <br>"3389457"   "3397451"  <br>"3430835"   "3458780").<br>PN. OR ("3672047").<br>URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON . | 2005/06/17<br>09:04 |

| S87 | 158 | ("3075282"   "3202489"   "3286340"   "3296692"   "3373481"   "3392442"   "3397451"   "3672047"   "3719981"   "3811186"   "3921285"   "4067104"   "4142288"   "4326663"   "4332341"   "4374457"   "4412642"   "4417392"   "4419818"   "4422568"   "4442938"   "4447857"   "4520561"   "4542438"   "4547833"   "4641426"   "4661192"   "4708885"   "4732313"   "4746300"   "4818728").PN. OR ("4955523").URPN. | US-PGPU<br>B;<br>USPAT;<br>USOCR | OR      | ON | 2005/06/17<br>09:10 |
|-----|-----|--|----------------------------------|---------|----|---------------------|
| S88 | 20  | ("5014111"   "5124277"  <br>"5176310"   "5485949"  <br>"5559054"   "5686353"  <br>"5740956"   "5857610"  <br>"5894983"   "5897049").<br>PN. OR ("5981371").<br>URPN.   | US-PGPU<br>B;<br>USPAT;<br>USOCR | OR      | ON | 2005/06/17<br>09:13 |
| S89 | 12  | ("3934108"   "3941298"  <br>"5176310"   "5431329"  <br>"5842628"   "5874354"  <br>"5938952"   "5960262"  <br>"5981371"   "6001724"  <br>"6270000").PN. OR<br>("6467677").URPN.   | US-PGPU<br>B;<br>USPAT;<br>USOCR | OR      | ON | 2005/06/17<br>09:14 |
| S90 | 13  | ("2679570"   "3431384"  <br>"3524964"   "3860782").<br>PN. OR ("3934108").<br>URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR | OR<br>· | ON | 2005/06/17<br>09:15 |
| S91 | 11  | ("3934108"   "4691854"  <br>"4750666").PN. OR<br>("5246159").URPN.   | US-PGPU<br>B;<br>USPAT;<br>USOCR | OR      | ON | 2005/06/17<br>09:15 |
| S92 | 18  | ("2501616"   "3341660"  <br>"3358897"   "3542277"  <br>"3863827"   "3973713"  <br>"4327860"   "4340166"  <br>"4387283").PN. OR<br>("4691854").URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR | OR      | ON | 2005/06/17<br>09:17 |

| S93 | 11     | S84 with first adj (tool or capillary) with second adj(tool or capillary)           | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR  | ON   | 2005/06/17<br>09:22 |
|-----|--------|---|--|-----|------|---------------------|
| S94 | 7      | ("4678114"   "5045151"  <br>"5396104"   "5656830").<br>PN. OR ("5950100").<br>URPN. | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR  | ON   | 2005/06/17<br>09:32 |
| S95 | 11     | ("4583676"   "4998002").<br>PN. OR ("5370300").<br>URPN.                            | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR. | ON   | 2005/06/17<br>09:36 |
| S96 | 7      | ("4678114"   "5045151"  <br>"5396104"   "5656830").<br>PN. OR ("5950100").<br>URPN. | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR  | ON   | 2005/06/17<br>09:47 |
| S97 | 0      | ("Hiroshi.in.").PN.   | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR  | OFF  | 2005/06/17<br>10:35 |
| S98 | 452260 | hiroshi.in.   | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR  | ON . | 2005/06/17<br>10:37 |
| S99 | 14530  | kanai.in.   | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR  | ON   | 2005/06/17<br>10:37 |

| S10<br>0  | 48099 | seiichi.in.  | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR   | ON | 2005/06/17<br>10:38 |
|-----------|-------|--|--|------|----|---------------------|
| S10<br>1  | 324   | S100 and (wire with bonding)   | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR   | ON | 2005/06/17<br>10:49 |
| S10<br>2  | 37    | S99 and (wire with bonding)  | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR   | ON | 2005/06/17          |
| \$10<br>3 | 2     | electrode with ( bond or<br>bonding or bunp or bumps<br>or bonded) with (hollow or<br>consentric or annular or<br>double or (two adj holes))<br>near2 (capillary or<br>capillaries or tool or tools) | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR   | ON | 2005/06/17<br>10:55 |
| \$10<br>4 | 3     | ("4526646").PN. OR<br>("4829664").URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR 3 | ON | 2005/06/17<br>10:54 |
| S10<br>5  | 42    | ("3743558"   "3894633"  <br>"4036484"   "4116376"  <br>"4239576"   "4292108"  <br>"4372802"   "4373840"  <br>"4459743").PN. OR<br>("4526646").URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR   | ON | 2005/06/17<br>10:54 |

| S10<br>6 | 21  | electrode and ( bond or<br>bonding or bunp or bumps<br>or bonded) with (hollow or<br>consentric or annular or<br>double or (two adj holes))<br>near2 (capillary or<br>capillaries or tool or tools)   | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR   | ON | 2005/06/17<br>10:58 |
|----------|-----|---|--|------|----|---------------------|
| S10<br>7 | 112 | electrode and (bond or<br>bonding or bunp or bumps<br>or bonded) with (hollow or<br>consentric or annular or<br>double or (two adj holes) or<br>two or (first near2 second)<br>or (smaller near2<br>bigger)with diameter) near2<br>(capillary or capillaries or<br>tool or tools) | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR   | ON | 2005/06/17<br>11:01 |
| S10<br>8 | 8   | ("5390844"   "5660318"  <br>"5686352"   "5743459"  <br>"5929517"   "5935542"  <br>"6006981"   "6011315").<br>PN. OR ("6173884").<br>URPN.   | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR   | ON | 2005/06/17<br>11:09 |
| S10<br>9 | 8   | ("5390844"   "5660318"  <br>"5686352"   "5743459"  <br>"5929517"   "5935542"  <br>"6006981"   "6011315").<br>PN. OR ("6173884").<br>URPN.   | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR . | ON | 2005/06/17<br>11:30 |
| S11<br>0 | 12  | ("5465259"   "5563973"  <br>"5702049").PN. OR<br>("5890643").URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR   | ON | 2005/06/17<br>11:36 |
| S11<br>1 | 86  | wire with bonding with (apparatus or tool or tools) with( two or second ) with (holes or hole or open or opening)   | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR   | ON | 2005/06/17<br>11:38 |

| S11<br>2 | 13   | ("2595270"   "3249276"  <br>"3799215"   "4559886"  <br>"4586667"   "4838499"  <br>"4880173"   "4928871"  <br>"4995541"   "5653380"  <br>"5685476").PN. OR<br>("6443384").URPN.                            | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON | 2005/06/17<br>11:42 |
|----------|------|---|--|----|----|---------------------|
| S11<br>3 | 72   | ("3596044"   "3672556"  <br>"3806019"   "3863827"  <br>"3894671"   "4053096"  <br>"4142714"   "4202482"  <br>"4213556"   "4437604"  <br>"4475681"   "4485957"  <br>"4527730").PN. OR<br>("4821945").URPN. | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON | 2005/06/17<br>11:47 |
| S11<br>4 | 9    | ("3252203"   "3342972").<br>PN. OR ("3596044").<br>URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON | 2005/06/17<br>11:50 |
| S11<br>5 | 17   | ("3342972").URPN.   | USPAT  | OR | ON | 2005/06/17<br>11:53 |
| S11<br>6 | 37   | ("2160659"   "3263057"  <br>"3263059"   "3297855"  <br>"3320401"   "3342972"  <br>"3435184").PN. OR<br>("4171477").URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON | 2005/06/17<br>12:13 |
| S11<br>7 | 18   | ("4171477"   "4489231").<br>PN. OR ("4950866").<br>URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON | 2005/06/17<br>12:20 |
| S11<br>8 | 23   | ("2339884"   "3244344"  <br>"3342972"   "3538292"  <br>"3648354").PN. OR<br>("4230925").URPN.   | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON | 2005/06/17<br>12:21 |
| S11<br>9 | 23   | ("2339884"   "3244344"  <br>"3342972"   "3538292"  <br>"3648354").PN. OR<br>("4230925").URPN.   | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON | 2005/06/17<br>14:42 |
| S12<br>0 | 1332 | (tool or tools or capillary or<br>capillaries) with wire with (<br>bonding or bonds or ball or<br>balls or bumps or bump or<br>bonded) with electrode\$3  | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/17<br>14:44 |

| S12<br>1 | 23   | S120 and pressing with first with electrode with wire with second                           | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR      | ON | 2005/06/17<br>14:47 |
|----------|------|---|--|---------|----|---------------------|
| S12<br>2 | 1196 | S120 and second capillary with press\$3 with (bonding or bond or weld or welding )with wire | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR      | ON | 2005/06/17<br>14:50 |
| S12<br>3 | 1181 | S120 and second capillary with press\$3 with (bonding or bond)with wire                     | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR      | ON | 2005/06/17<br>14:50 |
| S12<br>4 | 0    | S120 and (second adj<br>capillary) with press\$3 with<br>(bonding or bond)with wire         | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR<br>· | ON | 2005/06/17<br>14:51 |
| S12<br>5 | 15   | S120 and (second near5 capillary) with press\$3 with (bonding or bond)with wire             | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR      | ON | 2005/06/17<br>14:52 |

| S12<br>6 | 26 | S120 and (second near5 (capillary or tools or tool )) with press\$3 with (bonding or bond)with wire  | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/17<br>14:54 |
|----------|----|--|--|----|----|---------------------|
| S12<br>7 | 20 | S120 and (second near5<br>(capillary or tools or tool))<br>with WIRE with pass\$3<br>with through with (Capillary<br>or tool)  | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM TDB | OR | ON | 2005/06/17<br>14:56 |
| S12<br>8 |    | S120 and (second near5 (capillary or tools or tool)) with (concentric or inside or annular or bigger or larger) with first with (capillary or tool) with WIRE with pass\$3 with through with (Capillary or tool)       | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/17<br>14:58 |
| S12<br>9 | 1  | apparatus and (second near5 (capillary or tools or tool)) with (concentric or inside or annular or bigger or larger) with first with (capillary or tool) with WIRE with pass\$3 with through with (Capillary or tool)  | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/17<br>14:59 |
| S13<br>0 | 1  | apparatus with (second near5 (capillary or tools or tool)) with (concentric or inside or annular or bigger or larger) with first with (capillary or tool) with WIRE with pass\$3 with through with (Capillary or tool) | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/17<br>15:00 |

|          | ,    | Y   |  |    |    |                              |
|----------|------|---|--|----|----|------------------------------|
| S13<br>1 | 1    | (second near5 (capillary or tools or tool )) with (concentric or inside or annular or bigger or larger ) with first with (capillary or tool) with WIRE with pass\$3 with through with (Capillary or tool) | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/17<br>15:01          |
| S13<br>2 | 316  | wire with pass\$3 with<br>through with (capillary or<br>tool) with ( electrode or<br>substrate or pad or<br>protrution or bump)   | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/17<br>15:14          |
| S13<br>3 | 5650 | (capillary or capillar or capillaries or tools or tool) with (weld or welding or welded) with (apparatus or device or method)   | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/17<br>15:16          |
| S13<br>4 | 2490 | (capillary or capillar or capillaries or tools or tool) with (weld or welding or welded) with (apparatus or device or method)   | US-PGPU<br>B; USPAT  | OR | ON | 2005/06/17<br>15:16          |
| S13<br>5 | 177  | S134 with ( bond or bonding or bumps or ball or balls)  | US-PGPU<br>B; USPAT  | OR | ON | 2005/06/17<br>15:25          |
| S13<br>6 | 5    | capillary with capillary with (<br>consentric or annular or<br>second) with (passing or<br>inside )with through with<br>wire with (hole or holes)   | US-PGPU<br>B; USPAT  | OR | ON | 2005/06/ <u>1</u> 7<br>15:40 |
| S13<br>7 | 13   | ("4442967"   "5090119"  <br>"5172851"   "5299729"  <br>"5328079"   "5364009"  <br>"5485949"   "5842628").<br>PN. OR ("6079610").<br>URPN.   | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON | 2005/06/17<br>15:31          |

| S13<br>8 | 51 | ("4415115"   "5172851"  <br>"5364004").PN. OR<br>("5485949").URPN.  | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON  | 2005/06/17<br>15:32 |
|----------|----|---|--|----|-----|---------------------|
| S13<br>9 | 2  | "6079610" .pn.  | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON  | 2005/06/17<br>15:47 |
| S14<br>0 | 1  | (("20030146267") or<br>("6739496")).PN.   | USPAT;<br>USOCR  | OR | OFF | 2005/06/17<br>15:48 |
| S14<br>1 | 3  | (("20030146267") or<br>("6739496")).PN.   | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | OFF | 2005/06/17<br>15:48 |
| S14<br>2 | 7  | ("20010045443"  <br>"5199630"   "5377894"  <br>"6112972"   "6215195"  <br>"6447162"   "6648205").<br>PN. OR ("6739496").<br>URPN. | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON  | 2005/06/17<br>15:49 |
| S14<br>3 | 11 | ("4854494").PN. OR<br>("5199630").URPN.   | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON  | 2005/06/17<br>15:50 |
| S14<br>4 | 36 | ("3453540"   "3827619"  <br>"3857279"   "4040885"  <br>"4603802").PN. OR<br>("4854494").URPN.                                     | US-PGPU<br>B;<br>USPAT;<br>USOCR   | OR | ON  | 2005/06/17<br>15:51 |
| S14<br>5 | 5  | ("3453540").URPN.   | USPAT  | OR | ON  | 2005/06/17<br>15:55 |
| S14<br>6 | .1 | ("6196521").PN.   | USPAT;<br>USOCR  | OR | OFF | 2005/06/17<br>15:56 |

| S14<br>7 | 256956<br>7 | 228/110.1, "1.1", "51", "55".<br>ccls.   | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/20<br>08:26 |
|----------|-------------|--|--|----|----|---------------------|
| S14<br>8 | 377608      | S147 with (comprising or comprises or comprised or consist or consists or consisted) (first or second or double or two or consentric or annular) with (capillar or capillaries or tool or tools) | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/20<br>08:32 |
| S14<br>9 | 578         | S148 with wire with (bonding or bond or bonded or bonder or bump or bumps or balls or ball) with (first or second )with (electrode or semiconductor or substrate or substrates)                  | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/20<br>10:20 |
| S15<br>0 | 41454       | Mamoru.in.   | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/20<br>10:47 |
| S15<br>1 | 0           | S150 with bonding with equipment with bonding with method  | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TDB | OR | ON | 2005/06/20<br>10:47 |

| S15<br>2 | 6 | S150 and bonding with equipment with bonding with method | US-PGPU<br>B;<br>USPAT;<br>USOCR;<br>EPO;<br>JPO;<br>DERWEN<br>T; | OR | ON | 2005/06/20<br>10:48 |
|----------|---|--|---|----|----|---------------------|
|          |   |  | IBM_TDB   |    |    |                     |